L 2963-66
ACCESSION NR: AT5023567

zodiacal light was relatively small. A comparison of these readings (averaged) with the results of ground observations at 3200—4000 Å lead to the conclusion that night sky radiation at 2500—3000 Å is small and at 3200—4000 Å does not exceed star glow and zodiacal light. Measurements at 1700—2500 Å indicated that no night sky radiation exists in this region. Thus, results of measurements over the entire wavelength range (1700—4000 Å) confirmed the absence in the night sky of high-energy excitation processes. Orig. art. has: 7 figures. [JP]

ASSOCIATION: none

SUBMITTED: 02Sep65 ENCL: 00 SUB CODE: ES, AA

NO REF SOV: 004 OTHER: 008 ATD PRESS: 4109

BVK
Card 3/3

screened out UV radiation; its long-wave boundary was near 6000 Å. The second was used to investigate wavelengths at 2500 to 4000 Å, and two narrow-band filters with passbands of 100 Å filtered emission at 5577 Å and 3914 Å, respectively. An IR spectrophotometer recorded thermal radiation concurrently with the operation of the other two instruments. A correlation was found to exist between readings of the UV and IR spectrophotometers in the 9.65-μ ozone band. A correlation of intensities was also disclosed near the long-wave boundary of the UV spectrum at $\lambda > 3000$ Å and in the readings of the illumination sensor. These readings depended strongly on cloudiness because the albedo of clouds in the red zone is substantially greater than the albedo of the Earth's surface and of the clear atmosphere. The correlation confirms that at $\lambda > 3000$ Å, the noticeable part of atmospheric radiation is due to tropospheric dispersion and reflection occurring below the basic mass of the ozone layer. Conclusions were also reached on local, diurnal, and latitudinal variations of airglow. A difficulty arose in the evaluation because of the dependence of the readings on cloud cover. In making the measurements in space, it was necessary to include reflections of airglow from the atmosphere and glow of astronomical origin in addition to airglow itself. Consequently, results varied with atmospheric conditions by as much as a factor of two, with the minimum occurring during cloudless weather and the maximum during total cloudiness. The correlation of readings of one light filter (5577 Å) with the others indicated that the share of illumination from the stars and

L 61068-65 EWP(m)/EWT(1) Pd-4

ACCESSION NR: AP5017126 UR/0198/65/001/006/0078/0082

AUTHOR: Krasnoshapka, N. O. (Kiev)

TITLE: Effect of external drag on elastic structure stability in conditions of free flight

SOURCE: Prikladnaya mekhanika, v. 1, no. 6, 1965, 78-84

TOPIC TAGS: aeroelasticity, drag force, pressure distribution, stability criterion, elastic stress, approximation method

ABSTRACT: The effect of drag force on the stability of a flying elastic object was discussed in the frame of one-dimensional analysis. The governing aeroelasticity equation is given in a moving coordinate system Oxv

$$\frac{q(x)}{g^2}\frac{\partial^2 V(x,t)}{\partial t^2} - \frac{\partial}{\partial x}\left[P(x,t)\frac{\partial V(x,t)}{\partial x}\right] + \frac{\partial^2}{\partial x^2}\left[EI\frac{\partial^2 V(x,t)}{\partial x^2}\right] =$$

$$= -\frac{q(x)}{g}\ddot{v}(t) + f_0(x,t) - \frac{q(x)}{Q}R_0(t);$$

$$J_0\ddot{\varphi}(t) = M_0(t).$$

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where $V(x,t)$ = transverse deflection of the structure, f_x and f_y are the projections of the external forces on the x,y-axes, and R_x and R_y are defined by

$$R_x(t) = \int_0^l f_x(x,t)\,dx; \qquad R_y(t) = \int_0^l f_y(x,t)\,dx;$$

(see also Fig. 1 on the Enclosure). The longitudinal tensile or compressive force $P(x,t)$ is expressed by

$$P(x,t) = \frac{R_x(t)}{Q}\int_0^x q(x)\,dx + \int_0^x f_x(x)\,dx.$$

The governing boundary conditions are given by the four relations:

$$\left[EJ\frac{\partial^2 V(x,t)}{\partial x^2}\right]_{x=0} = 0; \qquad \left[EJ\frac{\partial^2 V(x,t)}{\partial x^2}\right]_{x=l} = 0;$$

$$\frac{\partial}{\partial x}\left[EJ\frac{\partial^2 V(x,t)}{\partial x^2}\right]_{x=0} = 0; \qquad \frac{\partial}{\partial x}\left[EJ\frac{\partial^2 V(x,t)}{\partial x^2}\right]_{x=l} = 0.$$

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ACCESSION NR: AP5017126

In order to reduce the partial differential equations into a system of ordinary differential equations the following Galerkin approximation is made

$$V(x,t)=q_1(t)\psi_1(x)+q_2(t)\psi_2(x).$$

The weight distribution of the structure q and the elasticity modulus EI are assumed to remain constant. Four different load distributions are considered. First, the drag force P_0 is assumed to act on the principal part of the structure in a direction tangent to the elastic line (see Fig. 2 on the Enclosure) and a characteristic equation of the type

$$\lambda^4+a_3\lambda^3+a_2\lambda^2+a_1\lambda+a_0=0$$

is obtained with the following stability criteria

$$a_0>0;\quad a_1>0;\quad a_2>0;\quad a_3a_2-a_1a_0>0;\quad 2a_1^2-9a_3^2\leq 0;$$

$$a_3^2(a_2^2-4a_0)+a_1a_3(18a_0-4a_2^2)-27a_0^2>0.$$

For this particular case the drag force is shown to have a stabilizing effect. Similar analyses are made with three other types of loading: force distribution

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ACCESSION NR: AP5017126

along the tangent to the elasticity line with intensity P_0, external load distribution along the Ox axis, and the drag force F_0 placed on the principal part of the structure and directed along Ox. The latter two load distributions tend to reduce the stability domain of the vehicle. Orig. art. has: 21 equations and 6 figures.

ASSOCIATION: Institut mekhaniki, AN UkrSSR (Institute of Mechanics, AN UkrSSR)

SUBMITTED: 15Jul64 ENCL: 01 SUB CODE: ME, AS

NO REF SOV: 006 OTHER: 000

Card 4/5

L 61668-65

ACCESSION NR: AP5017126

ENCLOSURE: 01

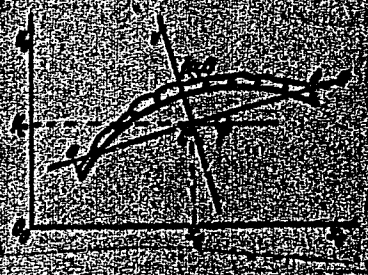

Fig. 1.

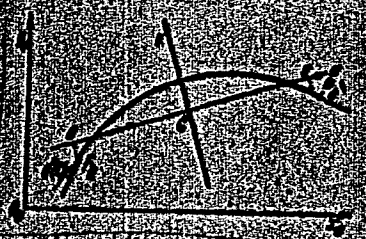

Fig. 2.

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ACC NR: AT7003835 SOURCE CODE: UR/3169/66/000/018/0058/0063

AUTHOR: Krasnoshchek, A. Ya.; Bezverkhov, B. D.; Bogayevskiy, L. G.

ORG: Dnepropetrovsk Geophysical Expedition (Dnepropetrovskaya geofizicheskaya ekspeditsiya)

TITLE: Tectonic structure of the northwestern Black Sea

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 18, 1966. Geofizicheskiye issledovaniya stroyeniya zemnoy kory (Geophysical investigations of the structure of the earth's crust), 58-63

TOPIC TAGS: geophysic expedition, tectonics, geologic exploration, prospecting

ABSTRACT: This article presents the results of a geophysical investigation of the tectonic structure of the northwestern area of the Black Sea. The investigation was undertaken in connection with the importance of the area with regard to the formation of gas and petroleum deposits. The opinions expressed concerning the tectonic structure of this area of the Black Sea will help to elicit the prospects of the presence of gas and petroleum within the Black Sea depression and to select the future direction of research operations. Orig. art. has: 3 figures.

SUB CODE: 08/ SUBM DATE: 10Mar65/ ORIG REF: 008

Card 1/1

KRASNOSHCHEKOV, L.F., kand. tekhn. nauk

Selecting heating units. Vod. i san. tekh.no.8:2-6 Ag '64
(MIRA 18:1)

KRASNOSEL'SKIY, M.M., insh.

Effect of the grab depth on the effectiveness of the coal cutter-loaders in the Donets Basin. Ugol' Ukr. 4 no.4: 13-16 Ap '60. (MIRA 13:8)
(Donets Basin--Coal mining machinery)

KRASNOSEL'SKIY, M.M., inzh.

Using optimal operating parameters for coal cutter-loaders.
Ugol' 39 no.7:26-31 Jl '64. (MIRA 17:10)

KRASNOSEL'SKIY, M. V.

"Fuel and Metallurgical Furnaces", by A. Ya. Mikhaylenko. Tsvet. Met., 14, No. 1, 1939. (Book Review)

Report U-1506, 4 Oct. 1951.

KRASNOSEL'SKIY, M.V.; RUDNEV, M.P.

Performance of annular furnaces at the Semiluki plant. Ogneupory 22 no.1:23-26 '57. (MLRA 10:3)

1. Semilukskiy ogneupornyy zavod.
(Semiluki--Refractory materials)

KRASNOSEL'SKIY, M.V.

AUTHORS: Boldyrev, L.V., Krasnosel'skiy, M.V., Rudnev, M.F. 131-3-2/16

TITLE: The Increase of the Efficiency of Shaft Furnaces With Gas Heating (Povysheniye proizvoditel'nosti shakhtnykh pechey na gazovom otoplenii)

PERIODICAL: Ogneupory, 1958, Vol 23, Nr 3, pp 101-105 (USSR)

ABSTRACT: At the Semiluki Plant for Refractories it was possible, by improving the construction of furnaces and of the burning process, to increase the daily output from 25-40 t to 65-70 t. I.A. Savkevich assisted in this work. The authors further describe the construction of the furnaces as well as the working process in detail. The revolving grate is shown in the illustration and its useful cross section is given by table 1. At present the burning process takes place as follows: 1.) The preparation of clay for burning. The clay is crushed by means of a machine and is formed into briquettes of 1 kg weight and shaped like flattened balls (Ø 120 and 90 mm). The quality of the clay and of the briquettes is continually controlled. 2.) Charging and discharging of the furnace. Every furnace is discharged in the course of each working shift according to the temperature of burning, of the material with which the furnace is filled, and the moisture content of the briquettes.

Card 1/2

The Increase of the Efficiency of Shaft Furnaces With Gas Heating

131-3-2/16

In accordance with the work to be performed the control apparatus КЭП-3 are adjusted, by means of which the charging drums are controlled (table 2). They are blocked by means of an electron millivolt meter which continuously controls the exhaust gases and which switches the control apparatus on or out according to necessity. Discharging of the furnace takes place in dependence of charging the furnace in order that a constant level of material be maintained. 3.) Gas- and air supply is determined according to consumption per hour, regulation being carried out according to burners. 4.) Control of furnace work. In the shaft furnaces of the Semiluksk works the following measurements are continuously carried out: Gas consumption, temperature of exhaust gases, temperature of the material in the furnace, furnace pressure and the level of material in the furnace. Besides, the temperature of the discharging fireclay bricks and their quality is continuously controlled. Table 3 contains the working data of shaft furnaces for the years 1950-1957. There are 3 tables, 1 figure, and 4 Soviet references

ASSOCIATION: Semiluki Plant for Refractories (Semilukskiy ogneupornyy zavod)

1. Gas burning furnaces-Operation 2. Furnaces-USSR 3. Refractory materials-Processing 4. Refractory materials-Production

Card 2/2

KRASNOSEL'SKIY, M.V.; PETROV, M.M.

Conveyor dryers for large articles. Mashinostroitel' no.2:7-8 F '64. (MIRA 17:3)

GOLOMB, L.M. [Holomb, L.M.]; KRASNOSEL'SKIY, V.M. [Krasnosel'skyi, V.M.]

Measurement and control of the pH of vat print paste. Leh.prom. no.4:60-61 O-D '62. (MIRA 16:5)

1. Rubezhanskiy filial nauchno-issledovatel'skogo instituta organicheskikh poluproduktov i krasiteley.
(Color printing--Equipment and supplies)

AUTHORS: Portnov, M. A. Candidate of Technical Sciences, Krasnosel'skiy, V. N., SOV/64-58-4-16/20

TITLE: Investigation of Glass Electrodes for the Automatic Control of the Production of Betanaphthol (Issledovaniye steklyannykh elektrodov dlya avtomaticheskogo kontrolya proizvodstva betnaftola)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 4, pp. 255-257 (USSR)

ABSTRACT: The present paper investigates high-temperature glass electrodes which can be used up to temperatures of 100°; M. D. Kravchenko and A. D. Starikova cooperated in the experimental part. The glass electrodes made of usual "electrode-glass" of the type "Korning 015", MacInnes, Yuz and others have some disadvantages; the first experiments for the production of a useful glass composition carried out by Sokolov and Pasynskiy (Ref 2) and Perley (Ref 1) showed that the additions of cesium- and rubidium oxide to lithium glass improve its quality and permit measurements up to 90° in alkaline medium. The present paper investigates

Card 1/3

Investigation of Glass Electrodes for the Automatic Control of the Production of Betanaphthol SOV/64-58-4-16/20

domestic types of glass electrodes worked out by A. S. Benevol'skiy at the TsLA (Central Laboratory for Automation) of the MChM. The electrodes had the following composition: SiO_2 - 64%, LiO_2 - 26%, Cs_2O - 2%, BaO - 3%, Nd_2O_3 - 3%, La_2O_3 - 2%; the investigations were carried out at the interval pH = 1 - 12 at 50 - 90°. The authors supply data on the technique of the investigations and they mention the results obtained. From these data may among other things be seen that a preliminary soaking of the electrodes does not bring about any change, while the hydrogen function dE/dpH at a certain temperature remains constant within a wide pH-range. The maximum deviation of the EMF of the electrode in the same buffer did not exceed 12 mV, independent of the previous operation conditions. The reproducibility of the electrodes with an automatic pH-meter is given as $\pm$ 0,4 pH. There are 5 figures, 5 tables, and 2 references, 1 of which is Soviet.

Card 2/3

Investigation of Glass Electrodes for the Automatic 30V/64-58-4-16/20
Control of the Production of Betanaphthol

ASSOCIATION: Rubezhanskiy filial nauchno-issledovatel'skogo instituta organicheskikh poluproduktov i krasiteley imeni K. Ye. Voroshilova (Rubezhnoye Branch of the Scientific Research Institute for Organic Semiproducts and Dyes imeni K. Ye. Voroshilov)

1. Naphthalems--Synthesis 2. Glass electrodes--Applications
3. Heat resistan glass--Applications

Card 3/3

KRASNOSHAPKA, M.M., doktor tekhn.nauk, prof. (Kiyev)

System for generating d.c. and a.c. with a stable frequency at a varying speed of the primary motor. Elektrichestvo no.6:38-44 Je '61. (MIRA 14:10)
(Electric generators) (Airplanes--Electric equipment)

KRASNOSHAPKA, MAKSIM MITROFANOVICH, doktor tekhn.nauk, prof.;
SHERSTOBITOV, IVAN SERGEYEVICH, inzhener

Transfer coefficient of an inverted single-armature converter with singular splitting of the poles. Izv. vys. ucheb. zav.; elektromekh. 4 no.5:30-34 '61. (MIRA 14:7)
(Electric current converters)

GRANDBERG, I.I.; KRASNOSHCHEK, A.P.; KOST, A.N.; FAIZOVA, G.K.

Pyrazoles. Part 38: Isopyrazole-pyrazole rearrangement. Zhur. ob. khim. 33 no.8:2586-2597 Ag '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

GARKALENKO, I.A.; KRASNOSHCHEK, A.Ya.

Eastern extension of the Dobruja. Geofiz.sbor. no.[illegible] '65.
(MIRA 18:12)

1. Dnepropetrovskaya geofizicheskaya ekspeditsiya tresta "Ukrgeofizrazvedka". Submitted September 21, 1964.

Krasnoshchek, I.F.

USSR/Cultivated Plants - Fruits. Berries. M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15760

Author : I.F. Krasnoshchek, V.I. Tyutyun
Inst :
Title : Cultivating Apples in the Nursery.
(Vyrashchivaniye yabloni v pitomnike).

Orig Pub : Sadovodstvo, vinogradarstvo i vinodeliye Moldavii, 1957, No 3, 55-57.

Abstract : No abstract.

Card 1/1

COUNTRY : USSR

CATEGORY : Cultivated Plants. Fruits. Berries. Nuts. Tea.

ABS. JOUR. : Ref Zhur -Biologiya, No. 3, 1959, No. 20485

AUTHOR : Krasnoshchek, I.F.

INST. : Uman' Agric. Inst.

TITLE : The Effect of Methods of Forming Grape Cuttings on Their Root Taking.

ORIG. PUB. : Vinodeliye i vinogradarstvo SSSR, 1958, No.2, 57

ABSTRACT : It has been shown in observations made by Uman' Agricultural Institute in the forest-steppe ectone portion of the Ukraine that the development of basal roots in transplanted grape stalks increases the frost resistance of the vines. Cuttings cut under the node without the entire diaphragm (2-3 mm below the diaphragm) or through the node even with the entire diaphragm do not thrive well and produce seedlings with poorly developed basal

CARD : 1/3

: Cultivated Plants

: A [illegible] Biology, [illegible], 1957, No. 10489

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: 30, [illegible]

: roots. The strongest basal roots on the seedlings developed when the cuttings were taken under the full node at 2-3 mm below the diaphragm. A characteristic of the structure of annual shoots of the European grape varieties is the broken alternation (2:1) of nodes with full and incomplete diaphragms. At nodes with a developed diaphragm there is always a tendril or inflorescence. Cuttings should be cut in such a manner that the lower part of the

: 2/3

: Cultivated Plants

: A [illegible] Biology, No. 9, 1957, No. 10489

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: 30, [illegible]

: ships being prepared contain both a node with a tendril. --I.K. Fatunatov

: 3/3

L 10360-67 EWP(j)/EWT(m) RM
ACC NR: AP7003108 SOURCE CODE: UR/0079/66/036/007/1240/1243

AUTHOR: Zemlyanskiy, N. I.; Chernaya, N. M.; Turkevich, V. V.; Krasnoshchek, V. I.

ORG: L'vov State University (L'vovskiy gosudarstvennyy universitet)

TITLE: Esters of selenothiophosphoric acid. III. Mixed esters of O,O-dialkyl-(aryl)selenothiophosphoric acid

SOURCE: Zhurnal obshchey khimii, v. 36, no. 7, 1966, 1240-1243

TOPIC TAGS: organoselenium compound, ester, organic synthetic process, phosphoric acid, IR spectroscopy, chromatography

ABSTRACT: The authors synthesized for the first time the potassium salt of O,O-diethylselenothiophosphoric acid and investigated its reactions with alkylating agents: alkyl bromides, alkenes, and alkynes. Reaction of the potassium salt with certain alkyl bromides yielded new mixed esters of O,O-diethylselenothiophosphoric acid, the reaction proceeding at the selenium atom. The methods of infrared spectroscopy and thin-layer chromatography indicated that the alkylation of the potassium salt results in the formation primarily of the thione isomer. This was confirmed by synthesizing the isomeric propyl and isoamyl esters of O,O-diethylselenothiophosphoric acid with a thiol structure by the reaction of O,O-diethylchloroselenophosphate with potassium mercaptides. Mixtures of the isomers were obtained, and their formation was interpreted as a partial rearrangement of the thione isomer to the thiol isomer during its isolation. Orig. art. has: 1 figure, 2 formulas and 1 table. [JPRS: 38,970]

SUB CODE: 07 / SUBM DATE: 17May65 / ORIG REF: 005 / OTH REF: 002
UDC: 547.26'118

Card 1/1

GUL', Sergey Mikhaylovich; KAMENEV, Nikolay Pavlovich; KOPYLOV, Boris Mikhaylovich; KRUKOVSKIY, Ignatiy Vladislavovich; NEDOSEKIN, Dmitriy Fedorovich; SEMERIKOV, Ivan Vasil'yevich; BARINOV, V.A., prof., doktor, retsenzent; KHRENOV, L.S., prof., doktor, retsenzent; KRASNOSHCHEKOV, A.N., prepodavatel', retsenzent; POLUNICHEV, I.A., red. izd-va; BACHURINA, A.M., tekhn. red.

[Laboratory manual of geodesy] Rukovodstvo dlia prakticheskikh zaniatii po geodezii. Moskva, Goslesbumizdat, 1960. 266 p. (MIRA 14:7)

1. Moskovskiy lesotekhnicheskiy institut (for Barinov). 2. Moskovskiy institut inzhenerov vodnogo khozyaystva imeni Ye.R.Vil'yamsa (for Khrenov). 3. TSentral'nyy zaochnyy lesotekhnicheskiy tekhnikum (for Krasnoshchekov)

(Surveying—Handbooks, manuals, etc.)

KRASHCHSHCHEKOV, G.

Collective Farms

Foremost state farms of Smolensk Province ("Collective farm 'Komintern'"; Reviewed by A. Bogdanov). Sots. sel'khoz. 23, no. 6, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, SEPTEMBER 1952. UNCLASSIFIED.

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000826120

KRASNOSHCHEKOV, I.

KRASNOSHCHEKOV, I., inzh.

The AGV-120 automatic gas water-heater. Zhil.-kom.khoz. 8 no.1:27-28 '58. (MIRA 11:1)

(Boilers) (Gas--Heating and cooking)

KRASNOSHCHEKOV, I.V.; RYABTSEV, N.I.

Tank truck for liquefied petroleum gases. Gaz.prom. no.10:12-13 O '57. (MIRA 10:10)

(Tank trucks) (Liquefied petroleum gas)

KRASNOSHCHEKOV, L.F.

Thermotechnical characteristics of heating plants with series of radiator units. Vod. i san. tekh.no.4:19-25 Ap '58. (MIRA 11:4)
(Radiators)

KRASNOSHCHEKOV, L.F., inzh.

Determining the heat output of radiators with various parameters of the heating medium and air. Sbor. trud. VNIIGS no.9:59-79 '58. (MIRA 12:7)

(Radiators)

KRASNOSHCHEKOV, L. F. Cand Tech Sci -- (diss) "Study of plate heaters with corridor and corridor-shifted layout of pipes." Mos, 1959. 23 pp (Min of Higher and Secondary Specialized Education RSFSR. Mos Order of Labor Red Banner Construction Engineering Inst im V. V. Kuybyshev), 150 copies (KL, 49-59, 140)

KRASNOSHCHEKOV, L.F. (Leningrad)

New formulas for calculating the design of air heaters. Vod. i san. tekh. no.11:17-22 N '60. (MIRA 13:11)
(Hot-air heating)

KLYACHKO, L.S., inzh.; KRASNOSHCHEKOV, L.F., inzh.; AKOPYAN, V.V., inzh.; ARAMANOVICH, R.P., inzh.

Standard for ventilation air ducts with rectangular cross sections. Mont.i spets.rab.v stroi. 22 no.6:26-28 Jl '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh i sanitarno-tekhnicheskikh rabot, trest Santekhmontazh-62.
(Ventilation)

KRASNOSHCHEKOV, L.F.

Methods of comparative evaluation and normative indices for steel radiators. Sbor. trud. VNIIOV no.18:105-110 '63.

Thermal calculation of heating plants. Ibid.:120-128
(MIRA 18:9)

UGLOV, F.G.; KURBANGALEYEV, S.M.; BOKAREV, Yu.N.; VORONOV, A.A.; DEGTYAREVA, Z.Ya.; KRASNOSHCHEKOVA, L.I.; MURSALOVA, F.A.; POTASHEV, L.V.; RASSVETAYEV, I.L.; SIMBIRTSEV, S.A.; SOKOLOV, S.S.

Use of the artificial blood circulation apparatus built by the Research Institute for Experimental Surgical Apparatus and Instruments in an experiment. Trudy NIIEKhAI no.5:132-137 '61.
(MIRA 15:8)

(PERFUSION PUMP (HEART))

UGLOV, F.G.; SAZONOV, K.N.; KRASNOSHCHEKOV, L.I.; SMIRNOV, A.D.

Diagnostic puncture of the atrium sinistrum with catheterization of the left cavities of the heart and the aorta. Trudy inst. klin. i eksper. kard. AN Gruz. SSR 8:569-575 (RA 17:7)

1. Iz gospital'noy khirurgicheskoy kliniki I Leningradskogo meditsinskogo instituta.

KRASNOSHCHEKOV, M.M.

Organizing the exchange of work experience among the garment factories in Leningrad. Shvein. prom. no.1:24-26 Ja '59. (MIRA 12:6)

(Leningrad--Clothing industry)

KRASNOSHCHEKOV, M.M. (Leningrad)

What hampers the growth of labor productivity? Shvein. prom. no.1:9-12 Ja-F '60. (MIRA 13:6)
(Leningrad--Clothing industry--Labor productivity)

KRASNOSHCHEKOV, M.M. (Leningrad)

Communist labor movement is a new stage of socialist competition. (MIRA 13:12)
Shvein.prom. no.5:4-7 S-O '60.
(Efficiency, Industrial)

SOROKIN, Aleksey Petrovich; KRASNOSHCHEKOV, M.M., kand. ekon. nauk, red.; SHILLING, V.A., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Work practices of brigades of communist labor in the enterprises of the Administration of the Clothing Industry of the Leningrad City Executive Committee; a lecture given in the Leningrad House of Scientific and Technical Propaganda at a seminar for workers in the clothing industry] Opyt raboty brigad kommunisticheskogo truda na predpriiatiiakh Upravleniia shveinoi promyshlennosti Lengorispolkoma; stenogramma lektsii, prochitannoi v LDNTP na seminare dlia rabotnikov shveinoi promyshlennosti. Leningrad, 1961. 18 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Seriia: Shveinaia promyshlennosti', no.2) (MIRA 14:12)
(Leningrad—Clothing workers—Education and training)

NOVIKOV, Nikolay Sergeyevich; KRASNOSHCHEKOV, M.M., kand. ekon. nauk, red.; FREGER, D.P., red. izd-va; GVIRTS, V.L., tekhn. red.

[Organization of the work for the exchange of practices in the "Bol'shevichka" Clothing Factory in Leningrad]Organizatsiia raboty po obmenu peredovym opytom na leningradskoi shveinoi fabrike "Bol'shevichka"; stenogramma lektsii, prochitannoi v LDNTP na seminare dlia rabotnikov shveinoi promyshlennosti. Leningrad, 1962. 26 p. (MIRA 15:11)
(Leningrad--Clothing industry)

KRASNOSHCHEKOV, M.M.; SOROKIN, A.P.

[Some results of the operations of the Clothing Industry Administration of the Executive Committee of Leningrad City under the new wage system] Nekotorye itogi raboty predpriiatii Upravleniia shveinoi promyshlennosti Lengorispolkoma v novykh tarifnykh usloviiakh. Leningrad, 1962. 31 p. (MIRA 15:12)
(Leningrad--Wages--Clothing industry)

KOCHEGURA, N.M.; KRASNOSHCHEKOV, M.M.; MARKOVSKIY, Ye.A.

Effect of nuclear radiation on the properties of metal alloys.
Struk.i svois.lit.splav. no.1:67-75 '62. (MIRA 15:5)
(Metals, Effect of radiation on) (Alloys--Testing)

KRASNOSHCHEKOV, M.M.

Modernization of the 31-173 A multicut lathe. Mashinostroenie no.4:113 Jl-Ag '62. (MIRA 15:9)
(Lathes--Technological innovations)

KRASNOSHCHEKOV, M.M.; PAKHOMOV, B.P.; MARKOVSKIY, Ye.A.

Use of radioactive isotopes in studying the wear resistance of crank shafts. Trakt. i sel'khozmash. 32 no.2:36-38 F '62. (MIRA 15:2)

1. Institut liteynogo proizvodstva AN USSR.
(Tractors--Engines)
(Radioactive substances--Industrial applications)

S/743/62/000/001/004/008

AUTHORS: Kochegura, N.M., Krasnoshchekov, M.M., Markovskiy, Ye.A.

TITLE: On the effect of nuclear radiations on the properties of metallic alloys.

SOURCE: Struktura i svoystva litykh splavov. no.1. Inst. lit. proizv. AN USSR. Kiev, Izd-vo AN UkrSSR, 1962, 67-75.

TEXT: The paper provides a discussion based on a literature survey, primarily of English-language Western publications. It discusses the effects of nuclear neutron radiation on metallic alloys in the sense of the Seitz and Brinkmann theories. The effects of neutron radiation on the hardness, tensile strength, and yield point of various steels, including SAE 1018 and 1095, stainless steel 304 and 316, and ASTM-A212B and -A242 with various grain sizes, are summarized in several extensive tables. Radiation impingement on cast structural steels, especially when in the normalized or annealed state, can substantially increase the strength of such materials, affording them a strength that approaches that of work-hardened steel. It is suggested that investigations be performed to establish the changes in the properties of irradiated cast materials versus the radiation dose and to ascertain the minimal radiation dose that affords the desired effect. It appears advisable also to undertake an investigation of the effect of neutron radiation on the heat

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treatment of cast alloys. There are 1 figure, 4 tables, and 23 references (9 Russian-language Soviet, 13 Russian-language translations of English-language original papers, and 1 English-language original: Harries, D., J. of Iron & Steel Inst., v.194, 1960, 289).

ASSOCIATION: Institut liteynogo proizvodstva, AN USSR (Institute of Casting Production, AS UkrSSR).

MARKOVSKIY, Ye.A.; KRASNOSHCHEKOV, M.M.

Measurement of the temperature of friction surfaces of parts by means of a weldless thermocouple. Zav. lab. 29 no.9: 1107-1109 '63. (MIRA 17:1)

1. Institut liteynogo proizvodstva AN UkrSSR.

MARKOVSKIY, Ye.A., inzh.; PAKHOMOV, B.P., inzh.; TIKHONOVICH, V.I., inzh.; KRASNOSHCHEKOV, M.M., inzh.

Using high-strength cast iron in precision friction pairs. Mashinostroenie no.4:105-106 Jl-Ag '63. (MIRA 17:2)

1. Institut liteynogo proizvodstva AN UkrSSR.

KRASNOSHCHEKOV, M.M., inzh.

Modern wear-resistant bearing materials. Mashinostroenie no.6: 99-103 N-D '63. (MIRA 16:12)

L 27617-65 EWP(w)/EWT(m)/EWG(c)/EWA(d)/EDF(n)-2/EWP(t)/T/EWP(b)/EWA(b) Pr-4/
Pu-4 JD/BW/WW/JG/GM/DJG

ACCESSION NR: AP5004012 S/0089/65/018/001/0072/0073

AUTHORS: Markovskiy, Yes. A.; Krasnoshchekov, M. M.

TITLE: Antifriction characteristics of neutron-irradiated steel

SOURCE: Atomnaya energiya, v. 18, no. 1, 1965, 72-73

TOPIC TAGS: neutron irradiation, radiation damage, steel, wear resistance, hardness

ABSTRACT: The purpose of the investigation was to determine the changes in the antifriction properties of medium-carbon steel under the influence of neutron irradiation under real conditions prevailing in a nuclear reactor, and to determine the minimum integral neutron flux causing a change in these properties. The samples tested were pins of St.45 steel (0.49% C, 0.56% Mn, 0.27% Si) 3 mm in diameter and 10 mm long. The samples were irradiated with different integral neutron fluxes and tested for hardness and for wear together with

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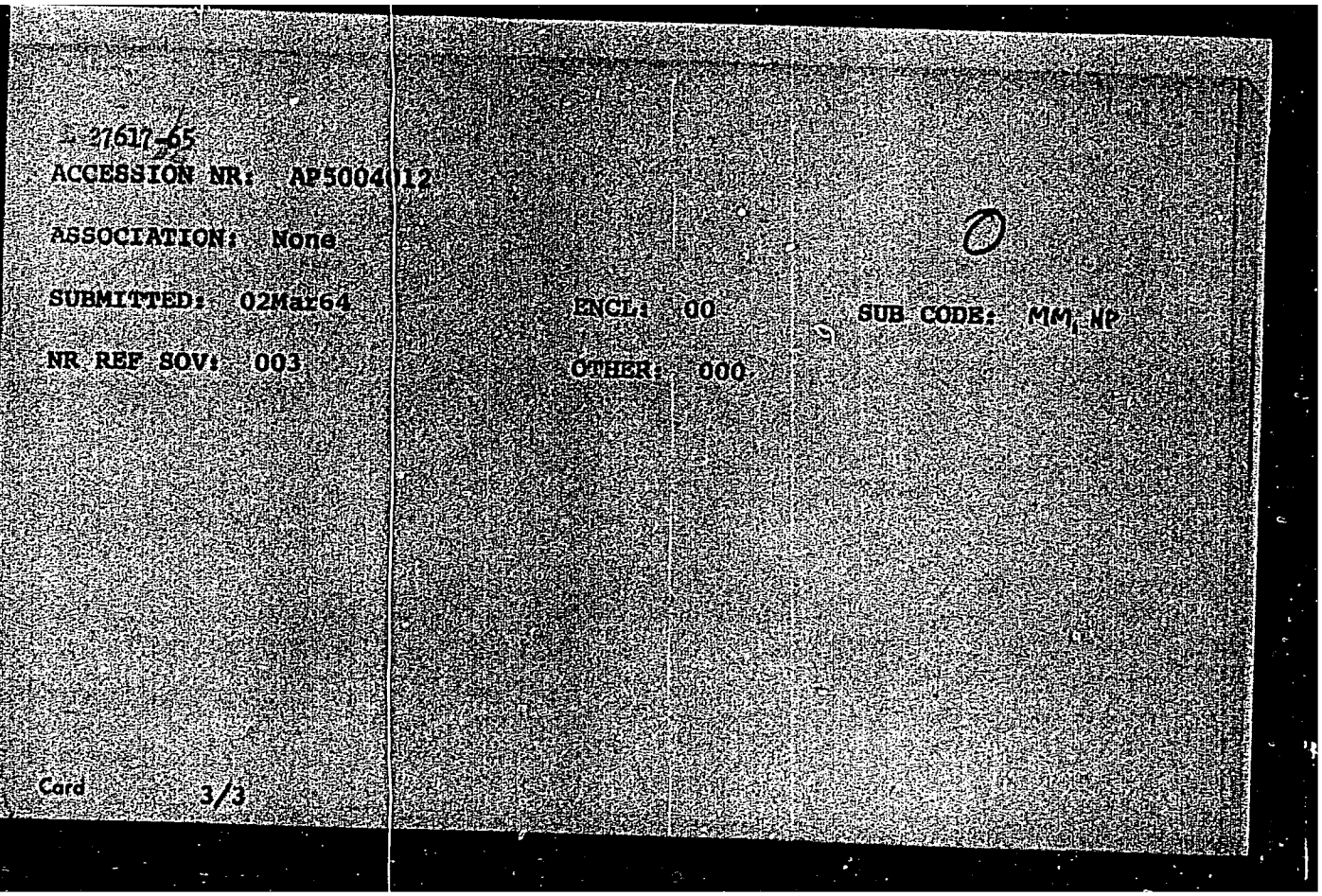
L 27617-65
ACCESSION NR: AP5004012

non-irradiated samples. The tests for wear were made with a laboratory setup described elsewhere (Ye. A. Markovskiy and V. I. Stetsenko, Zavodsk. laboratoriya No. 4, 503, 1958). The friction coefficient was measured with inductive pickups connected to an automatic recording galvanometer. The tests were made in fluxes of 10^{16}, 10^{17}, 10^{18}, 10^{19}, and 10^{20} neut/cm^2 in vertical channels of the nuclear reactor of Institut fiziki (Physics Institute) AN UkrSSR. The results have shown that the hardness has a minimum near 10^{17} neut/cm^2 for steel heat treated in different manners, and that at small radiation doses the wear resistance of annealed steel decreases, with the maximum wear occurring at 10^{18} neut/cm^2. Further increase in the dose reduces the wear, and when the flux is 10^{20} neut/cm^2 the wear is actually 30% lower than for non-irradiated samples. The reduction in hardness ranges from 2% for normalized steel to 8% for annealed steel. The effect of temperature is also briefly discussed. Orig. art. has: 3 figures.

Card 2/3



L 27617-65

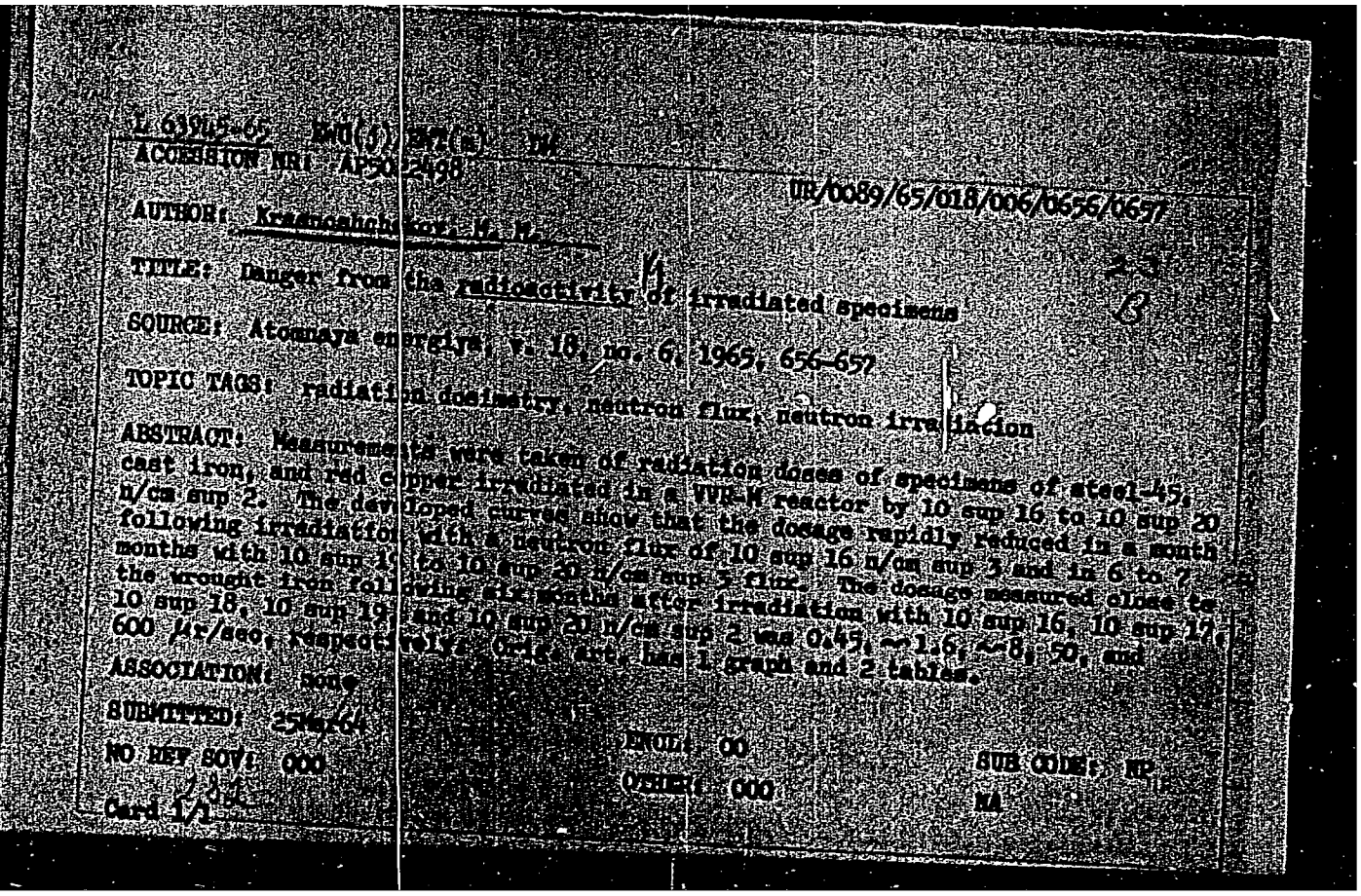
ACCESSION NR: AP5004112

ASSOCIATION: None

SUBMITTED: 02Mar64 ENCL: 00 SUB CODE: MM, NP

NR REF SOV: 003 OTHER: 000

Card 3/3



L 63945-65 EWT(m) EWT(m) WW
ACCESSION NR: AP5012468 UR/0089/65/018/006/0656/0657

AUTHOR: Krasnoshchekov, N. N.

TITLE: Danger from the radioactivity of irradiated specimens

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 656-657

TOPIC TAGS: radiation dosimetry, neutron flux, neutron irradiation

ABSTRACT: Measurements were taken of radiation doses of specimens of steel-45, cast iron, and red copper irradiated in a VVR-M reactor by 10 sup 16 to 10 sup 20 n/cm sup 2. The developed curves show that the dosage rapidly reduced in a month following irradiation with a neutron flux of 10 sup 16 n/cm sup 2 and in 6 to 7 months with 10 sup 20 n/cm sup 2 flux. The dosage measured close to the wrought iron following six months after irradiation with 10 sup 16, 10 sup 17, 10 sup 18, 10 sup 19 and 10 sup 20 n/cm sup 2 was 0.45, ~1.6, ~8, 50, and 600 kr/sec, respectively. Orig. art. has 1 graph and 2 tables.

ASSOCIATION: none

SUBMITTED: 25Mar64 ENCL: 00 SUB CODE: NP

NO REF SOV: 000 OTHER: 000 MA

Card 1/1

L 32536-65 EWP(t)/[illegible]/T/EWP(b) [illegible]
JD/GG

ACCESSION NR: AP5006[illegible] S/0126/65/019/002/0306/0308

AUTHOR: Markovskiy, [illegible] A.; [illegible], M. M.; Kochegura, N. M.

TITLE: Effect of irradiation with neutrons on the ferritic-pearlitic structure of iron-carbon alloys

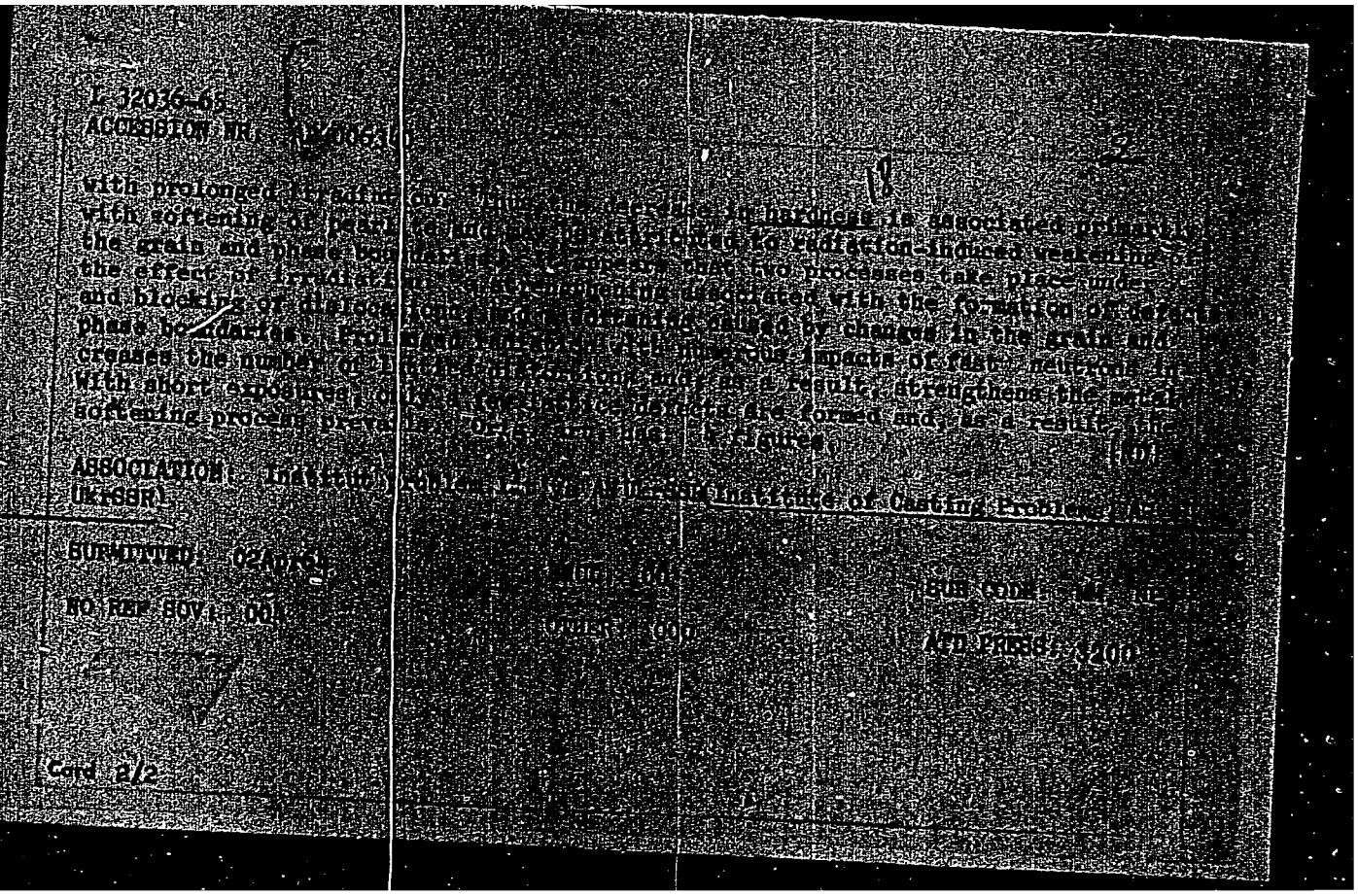
SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 2, 1965, 306-308

TOPIC TAGS: carbon steel, malleable iron, steel irradiation, malleable iron irradiation, pearlite, ferrite, neutron irradiation, irradiated steel property, irradiated malleable iron property, irradiated pearlite property, irradiated ferrite property

ABSTRACT: Specimens of carbon steel (0.19% C, 0.56% Mn, 0.27% Si) and malleable iron (3.13% C, 0.65% Mn, [illegible]% Si) annealed to a ferrite-pearlite structure with respective ferrite contents of 50 and 10% were irradiated with neutron doses of 10^{18} to 10^{20} neutron/cm^2. The hardness, tensile strength, yield strength, and wear resistance of both metals first dropped, but then increased with increasing dose. The effect of irradiation on the microhardness of pearlite in both materials was almost identical. The microhardness dropped at first and then increased. The microhardness of ferrite in steel rose continuously and that in iron dropped slightly

Card 1/2

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000826120(



L 12165-66 EWT(m)/EPF(n)-2/T/EWA(d)/EWP(t)/EWP(z)/EWP(b)/EWA(h) JD/DJ

ACC NR: AP5028371 SOURCE CODE: UR/0369/65/001/005/0552/0556

AUTHOR: Markovskiy, Ye. A.; Krasnoshchekov, M. M.; Kochegura, N. M.

ORG: Institute of Foundry Problems, AN UkrSSR, Kiev (Institut problem lit'ya AN UKrSSR)

TITLE: Changes in the antifriction and strength characteristics of structural materials subjected to neutron irradiation

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 5, 1965, 552-556

TOPIC TAGS: steel, copper, antifriction material, antifriction metal, neutron irradiation, nuclear reactor material, cast iron, irradiation effect, fabricated structural metal, metal physical property, stress relaxation

ABSTRACT: This work studies the changes in the antifriction parameters of some structural metals and alloys subjected to various degrees of neutron irradiation in an operational neutron reactor. Simultaneously, the changes in some of the strength characteristics of the materials are also determined. The materials studied were steel No. 45, various types of cast iron, copper, and SB-30 lead bronze. The results obtained give grounds to conclude that the accelerated process of stress relaxation under the effect of irradiation may take place not only for stressed materials but also for metastable hardened structures. An attempt

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2

L 12165-66

ACC NR: AP5028371

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is made to explain the time-dependent decrease in the strength of steel subjected to irradiation, but it is not sufficiently grounded. Further experimental work is required. The work performed showed, however, that the materials tested, after undergoing a stage of relative decrease in strength, obtain under prolonged neutron irradiation satisfactory antifriction and strength characteristics and may be successfully used in friction joints. Work in this field, according to the present authors, should be directed toward the study of the wear resistance and setting of materials under neutron irradiation, in vacuum, at high temperatures, and in special media. Orig. art. has: 5 figures.

SUB CODE: 11, 18 / SUBM DATE: 13Oct64 / ORIG REF: 002 / OTH REF: 001

antifriction materials

18.

HW

Card 2/2

MARKOVSKIY, Ye.A.; KRASNOSHCHEKOV, M.M.; KOCHEGURA, N.P.

Changes in the antifriction and strength characteristics of structural materials subjected to neutron irradiation. Fiz.-khim. mekh. mat. 1 no.5:552-556 '65. (MIRA 19:1)

1. Institut problem lit'ya AN UkrSSR, Kiyev. Submitted Oct. 13, 1964.

L 40796-66 EWT(m)/T/EWP(t)/ETI IJP(c) GG/DJ/JD

ACC NR: AP6019714 (A) SOURCE CODE: UR/0128/66/000/006/0032/0032

AUTHOR: Markovskiy, Ye. A. (Candidate of technical science); Krasnoshchekov, M. M. (Engineer)

56
55

ORG: none

TITLE: Softening of cast iron on irradiation with neutrons (Presented for discussion)

SOURCE: Liteynoye proizvodstvo, no. 6, 1966, 32

TOPIC TAGS: metal softening, neutron, radiation, cast iron, wear resistance, water moderated reactor

ABSTRACT: Normally, the neutron irradiation of metals increases their strength and reduces their plasticity. However, the irradiation of certain alloys with relatively small neutron doses in a conventional nuclear reactor without special cooling and in the presence of gamma radiation may lead to some softening of these alloys. This has been observed for not only alloys in work-hardened or annealed state but also for annealed malleable cast iron. Thus, the authors exposed groups of specimens of mallaeable cast iron, annealed for 34 hr at 970°C, to integral fluxes of 10^{16}, 10^{17}, 10^{18}, 10^{19}, and 10^{20} neutrons/cm^2 in a water-modera-

Card 1/3 UDC: 620.193.6:669.131.2

L 40796-66

ACC NR: AP6019714

-ted water-cooled reactor. Before and after the irradiation the specimens were tested for linear wear W, friction coefficient μ and temperature t of the lubricant emerging from the friction zone, Vickers hardness, and microhardness. The wear tests showed that W, μ and t are hardly affected by irradiation. (It is noteworthy, however, that W increases markedly in the presence of 10^{18} neutrons/cm^3, although it eventually again returns to normal.) Hardness, as a yardstick of plastic deformation, is a characteristic of the wear resistance of materials. The pattern of variation in the hardness of the irradiated malleable and high-strength cast irons resembles the pattern of variation in their wear resistance. Thus (Fig. 1) hardness decreases following

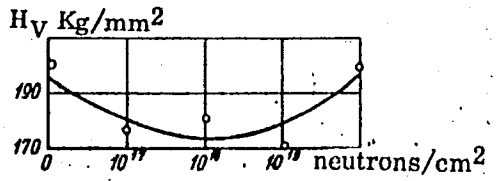

Fig. 1.

the irradiation of malleable cast iron with insignificant neutron fluxes (10^{17} - 10^{18} neutrons/cm^2)

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L 40796-66

ACC NR: AP6019714

but increases again as the neutron dose is increased. A similar pattern of variation in microhardness is observed. Evidently this is associated with the softening of the pearlitic component, since the hardness of the ferritic component increases monotonically with irradiation. It appears that the softening of annealed cast iron and various steels in the presence of low neutron doses is attributable to defects caused in the crystal lattice of the material by the neutron. As regards cast iron, a definite role is played by the cementite and ferrite grain boundaries, which apparently get weakened by the defects introduced by neutron irradiation, when these defects migrate toward grain boundaries. Thus, irradiation is accompanied by two simultaneous processes: softening of the material due to the weakening of grain boundaries and hardening of the crystal lattice in proportion to the number of the bombarding fast neutrons. As irradiation time increases, the hardening process begins to predominate. Orig. art. has: 3 figures.

SUB CODE: 11,18,20 / SUBM DATE: none/

Card 3/3

NATSENTOV, D.I., kandidat sel'skokhozyaystvennykh nauk; MKRTCH'YAN, V.S., kandidat sel'skokhozyaystvennykh nauk; ARKHANGEL'SKIY, P.Ye., inzhener; NOSKOV, B.G., arkhitektor; KRASNOSHCHEKOV, N., redaktor; LIL'YE, A., tekhnicheskiy redaktor

[Greenhouses, hotbeds and heated soil] Teplitsy, parniki, uteplennyi grunt. [Moskva] Moskovskii rabochii, 1956. 246 p. (MIRA 9:9)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva (for Natsentov, Mkrtch'yan) 2. Respublikanskiy gosudarstvennyy institut proyektirovaniya sovkhoznykh predpiyatiy - Rosgiprosovkhozstroi) (for Arkhangel'skiy). 3. Vsesoyuznyy gosudarstvennyy institut proektirovaniya sel'skokhozyaystvennykh predpriyatiy - Soyuzgiprosel'khoz (for Noskov)

(Hotbeds) (Soil heating) (Greenhouses)

KRASNOSHCHEKOV, N.

KALASHNIKOV, Aleksey Petrovich, kand.sel'skokhozyaystvennykh nauk; ZAGORSKIY, G., red.; KRASNOSHCHEKOV,N., red.; YAKOVLEVA, Ye., tekhn.red.

[Corn as feeding stuff for farm animals] Kukuruza v ratsionakh sel'skokhoziaistvennykh zhivotnykh. [Moskva] Mosk.rabochii, 1957. 59 p. (MIRA 11:1)

(Corn (Maize))

KRASNOSHCHEKOV, N., red.

[Orchards and vegetable gardens on personal lots] Sad i ogorod na priusadebnom uchastke. Moskva, Moskovskii rabochii, 1958. 382 p.
(Fruit culture) (Vegetable gardening) (MIRA 11:9)

TSAPKO, V. G.; PAUSTOVSKAYA, V. V.; KRASNOSHCHEKOV, N. A. (Kiyev)

Sanitary hygienic characteristics of work conditions in streptomycin production. Gig. truda i prof. zab. no.1:52-53 '62. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut.

(INDUSTRIAL HYGIENE) (STREPTOMYCIN—TOXICOLOGY)

PAUSTOVSKAYA, V.V., kand. med. nauk; TSAPKO, V.G.; KRASNOSHCHEKOV, N.A.

Effect of streptomycin on the organism. Vrach. dela no.2: 123-127 F'64 (MIRA 17:4)

1. Kafedra gigiyeny truda (zav. - chlen-korrespondent AMN SSSR prof. G.Kh. Shakhbazyan) Kiyevskogo meditsinskogo instituta.

KRASNOSHCHEKOV, N.N.

Sanitary and hygienic characteristics of the atmosphere in the preparatory shops of the milling and feltmaking industry. Kaz. med.zhur. 41 no.1:105-108 Ja-F '60. (MIRA 13:6)

1. Iz Vsesoyuznogo nauchno-issledovatel'skogo instituta okhrany truda Vsesoyuznogo tsentral'nogo soveta profsoyuzov v g. Kazani.
(TEXTILE INDUSTRY--HYGIENIC ASPECTS)
(AIR--POLLUTION)

KRASNOSHCHEKOV, N.N.

Incidence of disease among workers of the Kazan Fulling Mill and the Kukmorsk Felting and Footwear Plant. Kaz. med. zhur. no.4:91-95 Jl-Ag '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany truda (Kazan')
(TATAR A.S.S.R.--WOOL INDUSTRY AND TRADE--HYGIENIC ASPECTS)

KRASNOSHCHEKOV, N. N.: Cand Master Tech Sci (diss) -- "Some problems of the precision and control of the geometry of gear wheels with M. L. Novikov's gearing". Moscow, 1958. 19 pp (Acad Sci USSR, Inst of Machine Science), 150 copies (KL, No 1, 1959, 119)

KRASNOSHCHEKOV, N.N., inzh.

Checking spur gears with M.L.Novikov meshing. Vest.mash. 38 no.10:3-9 O '58. (MIRA 11:11)
(Gearing, Spur--Testing)

KRASNOSHCHEKOV, N.N.

Theoretical bases for evaluating the precision of M.L. Novikov spur gears. Trudy Inst. mash. 1:65-74 '59. (MIRA 12:12)
(Gearing, Spur--Testing)

KRASNOSHCHEKOV, N.S., aspirant

Degree of sensitivity of Novikov's gears to deviations of basic geometrical parameters. Izv. vys. ucheb. zav.; mashinostr. no.33/4: 52-63 '58. (MIRA 12:5)

1. Institut mashinovedeniya AN SSSR.
(Gearing)

PUTINTSEVA, M.A., nauchnyy sotr.; KRASNOSHCHEKOV, N.V., nauchnyy sotr.; BODRTDINOV, A.Z., nauchnyy sotr.; PESTRYAKOVA, A.I., red.; SOKOLOVA, N.N., tekhn. red.; TRUKHINA, O.N., tekhn. red.

[Higher speeds in the fields of Siberia] Povyshennye skorosti na poliakh Sibiri. Moskva, Sel'khozizdat, 1962. 86 p. (MIRA 15:6)

1. Sibirskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva (for Putintseva, Krasnoshchekov, Bodrtdinov).
(Siberia--Tractors)

SAMITOVA, P.Sh.;KRASNOSHCHEKOV, N.N.

Incidence of occupational diseases among workers at a fiber glass factory. Kaz. med. zhur. no.1:83-85 Ja-F'61. (MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany truda Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov v Kazani (direktor- kand.tekh.nauk V.A. Bakharev).

*

KRASNOSHCHEKOV, N.V., inzh.

Disc machinery for high-speed operation. Mekh.i elek.sots.sel'khoz. 20 no.4:22-23 '62. (MIRA 15:8)

1. Sibirskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva.

(Agricultural machinery)

KRASNOSHCHEKOV, P.S. (Moscow)

"Oscillations of a solid body having cavities filled up with a viscous fluid for large Reynolds numbers".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

L 36827-66 EWP(m)/EWT(1) GD

ACC NR: AT6016795 (N) SOURCE CODE: UR/0000/65/000/000/0265/0282

57
56
B+1

AUTHOR: Krasnoshchekov, P. S.; Moiseyev, N. N.; Shmidt, A. G.;

ORG: Computing Center, Academy of Sciences, SSSR, Moscow (Vychislitel'nyy tsentr Akademii nauk SSSR)

TITLE: A class of problems in the dynamics of viscous fluid

SOURCE: International Symposium on Applications of the Theory of Functions in Continuum Mechanics. Tiflis, 1963. Prilozheniya teorii funktsiy v mekhanike sploshnoy sredy. t..2: Mekhanika zhidkosti i gaza, matematicheskiye metody (Applications of the theory of functions in continuum mechanics. v. 2; Fluid and gas mechanics, mathematical methods); trudy simpoziuma. Moscow, Izd-vo Nauka, 1965, 265-282

TOPIC TAGS: viscous fluid, fluid flow, fluid dynamics, boundary value problem, nonsteady flow, Navier Stokes equation, harmonic function, harmonic oscillation

ABSTRACT: This report is devoted to some problems in the theory of nonsteady flow of a viscous fluid, originating during the oscillation of various solids which either contain fluid or are immersed in a fluid, as well as during the oscillations of fluid volumes having a free surface. The authors primarily investigate linear problems, i.e., problems on the oscillations of fluids with small amplitude.

Card 1/2

L 36827-66

ACC NR: AT6016795

A discussion shows that the boundary-value problem for the determination of the velocity field of viscous fluid flow with certain conditions may be reduced to the boundary-value problem (in the general case not self-congugate) for harmonic functions. The report presents a general method for the solution of such problems and investigates a series of problems involving osc llations of low-viscosity fluids, specifically, such problems as the oscillation of a fluid of infinite depth, free oscillations of a fluid confined in a vessel, forced oscillations, and oscillations of a spherical layer. The methods developed for the asymptotic integration of linearized Navier-Stokes equations make possible an effective investigation of a class of problems on the oscillation of solids filled with a viscous fluid. Two such problems are treated: a) the problem of a pendulum with a viscous fluid, and b) the plane problem of the motion of a solid with a viscous fluid in a central force field. It is shown in case b that as a result of the dissipation of energy the orbit eccentricity will constantly diminish; the radius of the limiting circular orbit is determined. An attempt is made to extend the methods developed to the problem of nonlinear oscillations. Orig. art. has: 3 figures and 47 formulas.

SUB CODE: 20/ SUBM DATE: 13Sept65/ ORIG REF: 002/ OTH REF: 001

Card 2/2

ACC NR: AT6034347 SOURCE CODE: UR/0000/66/000/000/0258/0266

AUTHOR: Krasnoshchekov, P. S. (Moscow)

ORG: none

TITLE: Small oscillations of a solid body with its cavity filled with a viscous liquid

SOURCE: Chislennyye metody resheniya zadach matematicheskoy fiziki (Numerical methods of solving problems in mathematical physics); sbornik statey. Moscow, Izd-vo Nauka, 1966, 258-266

TOPIC TAGS: viscous flow, incompressible fluid, Reynolds number, mechanical vibration, pendulum motion

ABSTRACT: The motion of a viscous incompressible fluid that completely fills a cavity in a solid body is analyzed when the body is subjected to small-amplitude oscillations relative to its center-of-mass motion. The governing linearized equations are given by

$$\frac{\partial \mathbf{V}}{\partial t} = \nabla\varphi - \frac{1}{\mathrm{Re}}(\nabla \times \Omega), \qquad \operatorname{div} \mathbf{V} = 0$$

where, at the cavity boundary, one has

$$u = -y\dot{\vartheta}, \qquad v = x\dot{\vartheta}, \qquad w = 0 \quad (\dot{\vartheta} = d\vartheta/dt).$$

Card 1/3 UDC: 517.9:532

ACC NR: AT6034347

After a successive application the "div" and "rot" operators, the following set of equations is obtained for the functions φ and Ω:

$$\Delta\varphi = 0, \quad \frac{\partial\Omega}{\partial t} = \frac{1}{\mathrm{Re}}\Delta\Omega,$$

and on the boundary

$$\frac{\partial\varphi}{\partial x} - \frac{1}{\mathrm{Re}}\left(\frac{\partial\Omega_3}{\partial y} - \frac{\partial\Omega_2}{\partial z}\right) = -y\ddot{\vartheta},$$

$$\frac{\partial\varphi}{\partial y} - \frac{1}{\mathrm{Re}}\left(\frac{\partial\Omega_1}{\partial z} - \frac{\partial\Omega_3}{\partial x}\right) = x\ddot{\vartheta},$$

$$\frac{\partial\varphi}{\partial z} - \frac{1}{\mathrm{Re}}\left(\frac{\partial\Omega_2}{\partial x} - \frac{\partial\Omega_1}{\partial y}\right) = 0 \qquad (\ddot{\vartheta} = d^2\vartheta/dt^2).$$

For planar oscillations,

$$\Omega_n = 2\dot{\vartheta}\cos(\vec{n}, z)$$

is added to the above set. The solution is obtained by a series expansion technique

$$\varphi = \varphi_0 + \varepsilon\varphi_1 + \varepsilon^2\varphi_2 + \ldots,$$

$$\Omega_k = \frac{1}{\varepsilon}\Omega_{0k} + \Omega_{1k} + \varepsilon\Omega_{2k} + \ldots \qquad (k = 1, 2, 3)$$

leading to the results

$$u = -\frac{r(\beta)\cos\alpha}{2\sqrt{\pi}}\eta\int_0^t \dot{\vartheta}(t-\tau)\frac{\exp[-\eta^2/4\tau]}{\tau^{3/2}}d\tau + O(\varepsilon),$$

$$v = \frac{r(\beta)\sin\alpha}{2\sqrt{\pi}}\eta\int_0^t \dot{\vartheta}(t-\tau)\frac{\exp[-\eta^2/4\tau]}{\tau^{3/2}}d\tau + O(\varepsilon),$$

$$w = 0.$$

Card 2/3

ACC NR: AT6034347

The example of a pendulum with an axisymmetric cavity filled with viscous liquid is considered. The analysis leads to an integro-differential equation which is solved by an averaging method. Orig. art. has: 23 equations.

SUB CODE: 20/ SUBM DATE: 16Apr65/ ORIG REF: 004

Card 3/3

S/040/63/027/002/001/019
D251/D308

AUTHOR: Krasnoshchekov, P. S. (Moscow)

TITLE: On the oscillations of a physical pendulum having a hollow filled with viscous liquid

PERIODICAL: Prikladnaya matematika i mekhanika, v. 27, no. 2, 1963, 193-202

TEXT: The problem stated is investigated by a method similar in principle to that used by N. N. Moiseyev (Zhurnal vychislit. matemat. fiziki, 1961, v. 1, no. 3). On the basis of the Navier-Stokes equations, and the equation of continuity, a solution is sought in the form

$$\vartheta(t) = ce^{\sigma t}, \quad \underline{V} = ce^{\sigma t}\,\underline{U}(x,y,z) \qquad (1.9)$$

where $\theta = \alpha\vartheta$ is the angle of inclination of the pendulum to the

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equilibrium position, α is the characteristic amplitude, U is the potential of the massive forces acting on the liquid. It is assumed that the Reynolds' number N_{Re} is sufficiently large, and $1/N_{Re} = \varepsilon^2$ where ε is a small parameter. By using small parameter methods and four boundary conditions, and adopting a linearized equation for $\underline{V}$, an approximate solution

$$u' = c\frac{R}{T}\left[1\sigma - r(\beta)\sigma\cos\alpha\, e^{-\sqrt{\sigma}\eta} + O(\varepsilon)\right]e^{\sigma t}$$

$$w' = 0$$

$$v' = -c\frac{R}{T}\left[r(\beta)\sigma\sin\alpha\, e^{-\sqrt{\sigma}\eta} + O(\varepsilon)\right]e^{\sigma t} \qquad (1.27)$$

is obtained which, for sufficiently large values of N_{Re} will be sufficiently precise. Here l is the distance of the center of gra-

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vity of the cavity from the axis of support, relative to the characteristic dimension of the cavity. A method of evaluating σ is given, using complex variable methods, which gives a sixth degree polynomial which by Descartes' rule has one positive root. By writing

$$\sqrt{x} = y, \quad \frac{\omega^2}{\nu^2 \lambda^4} = q^2$$

and taking q to be large, an expansion in powers of $1/\sqrt{9}$ is obtained. It is shown that this case of large q corresponds to the oscillations of a pendulum containing an ideal liquid. A simplified example is considered as an illustration. There are 3 figures.

SUBMITTED: January 29, 1962

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KRASNOSHCHEKOV, S.I.

Causes of fluctuations in the abundance of the whitefish Coregonus autumnalis Pall. in Lake Baikal. Trudy sov. Ikht. kom. no.13:238-247 '61. (MIRA 14:8)

1. Sibirskoye otdeleniye Gosudarstvennogo nauchno-issledovatel'skogo instituta ozernogo i rechnogo rybnogo khozyaystva - GosNIORKh.
(Baikal, Lake—Whitefishes)

KRASNOSHCHEKOV, S.I.

Strains of Baikal whitefish Coregonus autumnalis migratorius.
Krat.soob. BKNII no.3:89-100 '62. (MIRA 16:5)
(Baikal Lake--Whitefishes)

KRASNOSHCHEKOV, S.I.

Abundance of the Baikal whitefish and causes for its fluctuation.
Vop. ekol. 5:106-109 '62. (MIRA 16:6)

1. Sibirskoye otdeleniye gosudarstvennogo nauchno-issledovatel'skogo instituta ozernogo i rechnogo rybnogo khozyaystva, Krasnoyarsk.
(Baikal, Lake--Whitefishes)

KRASNOSHCHEKOV, S.Z.

My suggestion for economizing materials in a container plant.
Masl.-shir.prom. 19 no.4:30-31 '54. (MLRA 7:7)

1. Khar'kovskiy shirkombinat.
(Container industry) (Woodworking industries)

POLYAKOV, A.A., prof.; KRASNOSHCHEKOV, V.A., aspirant

Veterinary hygiene and disinfection in swine erysipelas. Veterinariia 40 no.2:59-64 F '63. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy sanitarii.

KRESHKOV, A.P.; MYSHLYAYEVA, L.V.; KHACHATURYAN, O.B.; KRASNOSHCHEKOV, V.V.

Potentiometric method for the determination of silicon in organosilicon compounds. Izv.vys.ucheb.zav.; khim. i khim.tekh. 7 no.2: 198-201 '64. (MIRA 18:4)

1. Kafedra analiticheskoy khimii Moskovskogo khimiko-tekhnologicheskogo instituta im. D.I.Mendeleyeva.

MYSHLYAYEVA, L.V.; MIKHAYLENKO, Yu.Ya.; KRASNOSHCHEKOV, V.V.; KUCHKAREV, Ye.A.

Rapid method of determining chlorine in alkyl(aryl)chlorosilanes.
Trudy MKHTI no.44:139-142 '64. (MIRA 18:1)

KRESHKOV, A.P.; MYSHLYAYEVA, L.V.; GENSHAFT, Yu.S.; KRASNOSHCHEKOV, V.V.

Interaction of silicohydrofluoric acid with benzidine. Zhur.neorg.khim. 9 no.1:183-186 Ja '64. (MIRA 17:2)

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B101/B186

AUTHORS: Kreshkov, A. P., Myshlyayeva, L. V., Krasnoshchekov, V. V.

TITLE: Methods for determining silicon in organosilicon compounds and their comparative evaluation. Silicon determination in hydrolyzable organosilicon compounds

PERIODICAL: Plasticheskiye massy, no. 12, 1962, 51-55

TEXT: Si was determined gravimetrically, volumetrically and colorimetrically in hydrolyzable organosilicon compounds of the general formula SiR_4, where R is a methoxy to hexyloxy, phenyloxy, acetoxy, furfuryloxy or isothiocyanate radical, also in polymers of these compounds and in resins modified with these compounds. The utility of these analytic methods is compared. (1) Gravimetric determination by hydrolysis and weighing of the calcined SiO_2: Only the methoxy, phenoxy, acetoxy, furfuryloxy and isothiocyanate compounds can be hydrolyzed quantitatively and with a satisfactory rate in ammoniacal solution. Hydrolysis in HCl requires for the methoxy compound

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a HCl concentration of 1 : 10, for ethoxy and propoxy compounds 1 : 1, and for the higher radicals concentrated HCl. (2) The volumetric determination was performed according to L. Kalman, R. Vago (Magyar kem. folyoirat, 64, 123 (1958)): Hydrolysis of the substance analyzed with 40% aqueous-alcoholic HF solution, neutralization of H_2SiF_6 with KOH, hydrolysis of K_2SiF_6 with $CaCl_2$ and iodometric HCl determination. (3) Si was determined colorimetrically by treating the substance with 15% KOH and 5% ammonium molybdate, reduction with Na_2SO_3 + Na_2SO_4 and by colorimetry of the blue solution formed. Conclusion: For industrial laboratories and scientific research laboratories the volumetric method is recommended, since it requires little time (20-30 min) and its results almost equal those obtained in gravimetrical analysis. There are 7 tables.

KRESHKOV, A.P.; MYSHLYAYEVA, L.V.; KRASNOSHCHEKOV, V.V.

Methods of determining silicon in organosilicon compounds and their comparative evaluation. Determination of silicon in hydrolyzing organosilicon compounds. Plast. massy no.12:51-55 '62. (MIRA 16:1)
(Silicon—Analysis) (Silicon organic compounds)